	Application No.	Applicant(s)	·
Notice of Allowability			
	09/672,237 Examiner	CAID ET AL.  Art Unit	
	Cxammer	Artonit	
	Joseph P. Hirl	2129	_
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in b) or other appropriate communication is second communication is second communication in the communication is second communication in the communication is second communication in the communicat	ithis application. If not included unication will be mailed in due course. The	HIS itiative
1. This communication is responsive to <u>January 16, 2007</u> .			
2. The allowed claim(s) is/are <u>1-35</u> .			
3. Acknowledgment is made of a claim for foreign priority uses a) All b) Some c) None of the:		or (f).	
Certified copies of the priority documents hav	,		
2. Certified copies of the priority documents hav			
<ol><li>Copies of the certified copies of the priority do</li></ol>	ocuments have been received	d in this national stage application from t	he
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:	•		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file MENT of this application.	a reply complying with the requirements	5
4. A SUBSTITUTE OATH OR DECLARATION must be submiNFORMAL PATENT APPLICATION (PTO-152) which give	nitted. Note the attached EXA res reason(s) why the oath or	MINER'S AMENDMENT or NOTICE OF declaration is deficient.	= '.
5. CORRECTED DRAWINGS ( as "replacement sheets") mu	st be submitted.		
(a) I including changes required by the Notice of Draftsper		( PTO-948) attached	
1) hereto or 2) to Paper No./Mail Date_			
(b) including changes required by the attached Examiner Paper No./Mail Date	's Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	1.84(c)) should be written on the the header according to 37 CF	ne drawings in the front (not the back) of R 1.121(d).	
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT	osit of BIOLOGICAL MATE FOR THE DEPOSIT OF BIO	ERIAL must be submitted. Note the DLOGICAL MATERIAL.	
Attachment(s)	_		
1. Notice of References Cited (PTO-892)		ormal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Su	ımmary (PTO-413),	
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 1/16/7	7. Examiner's	Mail Date Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit	· 8. 🛛 Examiner's	Statement of Reasons for Allowance	
of Biological Material	9.	PRIMARY EXAMINER TECHNOLOGY CENTER 2100	

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## Reasons for Allowance

- 1. Claims 1-35 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

The prior art taken alone or in combination fails to teach the claims invention of context vector generation and storage for the purpose of retrieval of documents wherein context vectors represent conceptual relationships among information by quantitative means, relationship among context vectors are deterministic and summary vectors of records are clustered to reduce searching time facilitating retrieval of records using a query interface. Claim 1 also limits to orthogonal context vectors, proximal cooccurrences and similar vector orientation. Claim 18 also limits to an RxR mutual cooccurrence matrix with Singular Value Decomposition. Claim 21 also limits to association of context vectors with information items having similar items in vector space having summary context vectors and searching by query using a summary context vector created from the guery. Claim 23 also limits to proximal co-occurrences with context vectors related to predetermined encoded meanings and similar orientation. Claim 27 also limits orthogonal context vectors to information items in a dictionary of information items. Claim 33 also limits to orthogonal context vectors of neighboring information items that proximally co-occur with target information. Claims 34 context vectors to automatically index documents using a defined index of terms.

The closest prior art (Kimoto, Construction of a Dynamic Thesaurus and Its Use for Associated Information Retrieval, Nippon Telegraph and Telephone Company) teaches an information retrieval system based on a dynamic thesaurus using a

connectionist approach consisting of nodes which represent each term in the thesaurus and links or connections between nodes. Node weights and links reflect a user's particular interest. Five kinds of relations are identified between the nodes to include a co-occurrence relation that is obtained from keyword relations in term information. In many ways Kimoto's teachings are different from that of the applicant such as Kimoto does not teach context vectors for use in storage and retrieval of information items where the n dimensional context vectors are generally orthogonal to each other and similarity is determined by proximal co-occurrences in vector space.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Correspondence Information

3. Any inquiry concerning this information or related to the subject disclosure should be directed to the Primary Examiner, Joseph P. Hirl, whose telephone number is (571) 272-3685. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the .

Examiner's supervisor, David R. Vincent can be reached at (571) 272-3080.

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Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

Hand delivered to:

Receptionist,

Customer Service Window,

Randolph Building,

401 Dulany Street,

Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 273-8300 (for formal communications intended for entry.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Joseph P. Hirl Primary Examiner March 14, 2007